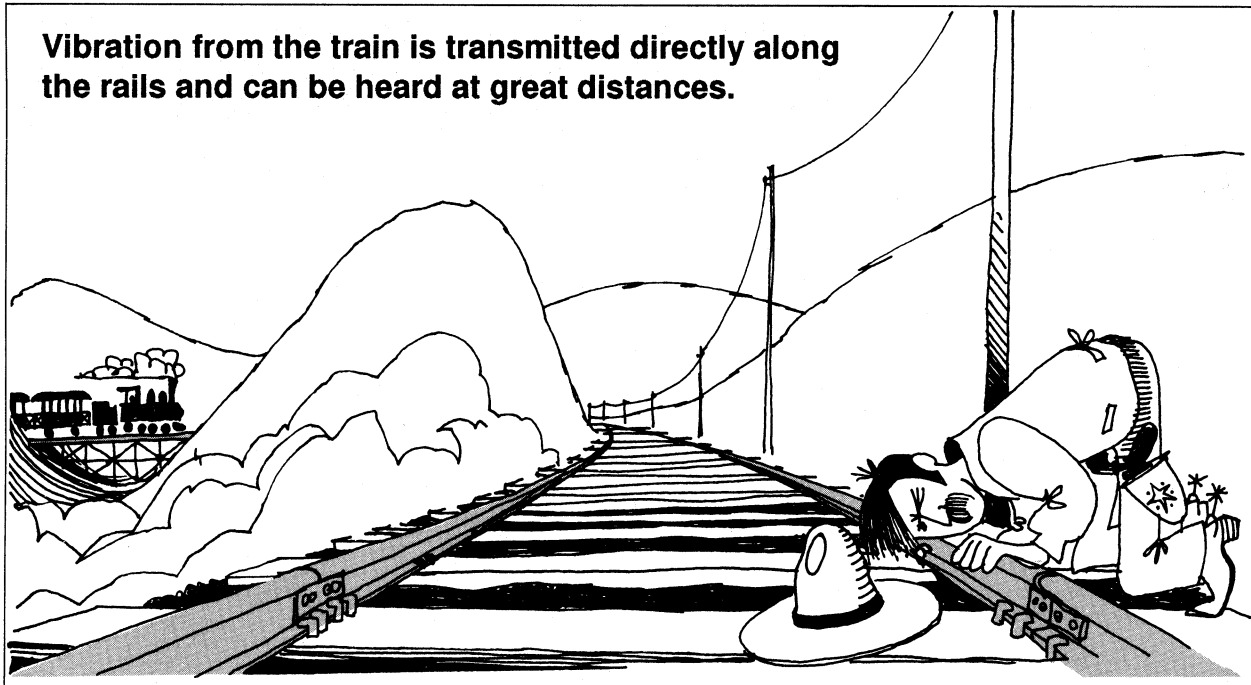


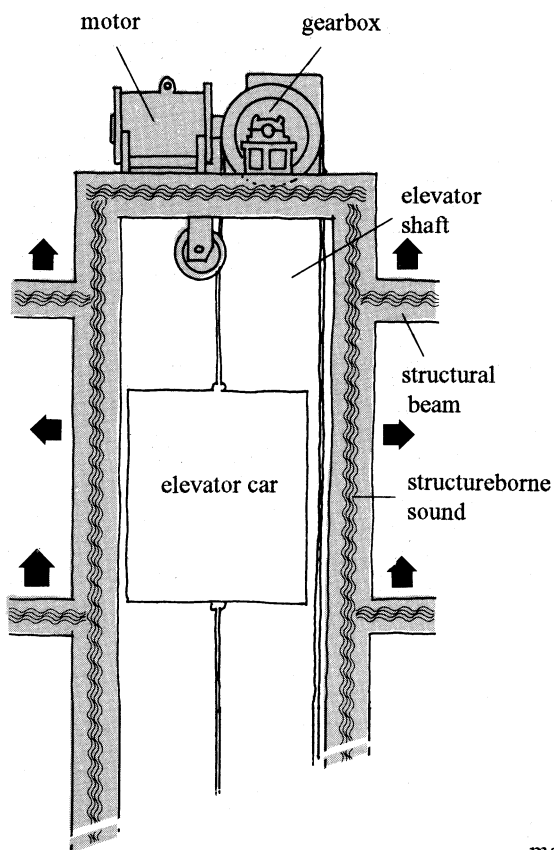
## **STRUCTUREBORNE SOUND TRAVELS GREAT DISTANCES**

Vibrations in solids can travel great distances before producing airborne sound. This problem is especially pronounced in concrete buildings and on ships. When the structureborne sound reaches a large surface, the airborne sound radiated can become a problem. The best solution is to block the vibrations as close to the source as possible.

### **Principle**

**Vibration from the train is transmitted directly along the rails and can be heard at great distances.**





### CONTROL MEASURE

The elevator drive can be isolated from the building structure by flexible elements. Further reduction can be achieved by constructing the elevator shaft and installing the drive so that they are completely isolated from the rest of the building structure.

### EXAMPLE

Vibrations and stop/start shocks from an elevator drive are transmitted throughout a building. Structureborne sound is carried hundreds of meters in the concrete skeleton, virtually without attenuation.

